

SEQUENCE LISTING

6/11/02

<110> KYOWA HAKKO KOGYO CO., LTD

<120> Novel Transaldolase

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<140> US/10/088,594

<141> 2002-03-21

<150> JP 99/266548

<151> 1999-09-21

<160> 3

<170> PatentIn Ver. 2.0

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<212> DNA

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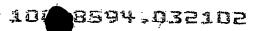
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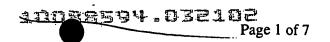


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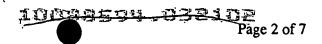
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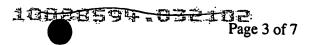
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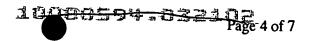
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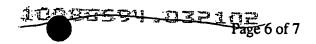
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	190					195					200					205	
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167	Phe	Trp	Asp	Asp	Asn	Arg	Ile	Ser	Ile	Glu	Asp	Asn	Thr	Glu	Ile	Ala	
168					210					215					220		
169	ttc	aac	gag	gac	gtt	gtt	gct	cgt	tac	aag	gct	tac	ggc	tgg	cag	acc	1083
170	Phe	Asn	Glu	Asp	Val	Val	Ala	Arg	Tyr	Lys	Ala	Tyr	Gly	Trp	Gln	Thr	
171				225					230					235			
172	att	gag	gtt	gag	gct	ggc	gag	gac	gtt	gca	gca	atc	gaa	gct	gca	gtg	1131
173	Ile	Glu	Val	Glu	Ala	Gly	Glu	Asp	Val	Ala	Ala	Ile	Glu	Ala	Ala	Val	
174			240					245					250				
175	gct	gag	gct	aag	aag	gac	acc	aag	cga	cct	acc	ttc	atc	cgc	gtt	cgc	1179
															Val		
177		255			_	_	260	_	_			265				_	
178	acc	atc	atc	ggc	ttc	cca	gct	cca	acc	atq	atq	aac	acc	gat	gct	ata	1227
															Ala		
180				-		275					280			_		285	
181	cac	aat	act	act	ctt	aac	σca	act	σασ	at.t.		σca	acc	ааσ	act		1275
															Thr		
183		1			290	1				295				-10	300	0_0	
	ctt	ασα	ttc	σat		σασ	act	cac	ttc		atc	αас	σat	σασ	gtt.	atc	1323
															Val		1020
186		0-1		305		OLU	****	1113	310	niu	110	usb	nop	315	Vul	116	•
	act	cac	acc		tcc	ctc	aca	nan		act	aca	can	227		gct	aa.	1371
188	Δla	Hic	Thr	Ara	Sar	LAU	λla	Clu	Ara	Ala	λla	Cln	Tue	Tre	Ala	y Ca Ala	13/1
189	лта	.113	320	ary	OET	neu	пта	325	w. A	ula	vra	GTII	330	пуз	wid	VIG	
	taa	car		227	++~	ne+			~~	ac+	acc	225		~-~	aac	226	1410
101	~yy	Cla	y LC	Tue	Dha	yat Non	clu	ryy m~∽	yca x1-	312	31°	aac ac=	DYA	gay	aac aac	aay	1419
192	тъ	335	AGT	пÃр	FIIE	vaħ	340	ттр	WIG	HIG	HIG		PIO	GIU	Asn	гЛЗ	
	ac+		++-	~~+		a+-		+		~~~	_++	345			.		1467
T 3 2	get	cig	LEC	gat	cgc	ctg	aac	CCC	cgt	gag	CLL	cca	gcg	ggc	tac	gct	1467



Input Set : A:\PTO.DC.txt

		Leu	Phe	Asp	Arg		Asn	Ser	Arg	Glu		Pro	Ala	Gly	Tyr	Ala 365	
	350	<i>a</i> = <i>a</i>	ota	003	202	355	ant.	aa.	ast	a2a	360	~~~	ata	~ ~~	act		1515
															Thr		1313
198	usħ	GIU	пеп	FIU	370	115	nap	AIG	тэр	375	Llys	GIY	Val	AIG	380	ary	•
	aan	act	tcc	ααα		пса	ctt	can	oca.		aac	aan	acc	ctt	cct	αaα	1563
															Pro		1303
201	2,5	*****	DCI	385			بده	0111	390	Deu	017	275		395	110	Olu	
	cta	t.aa	aac		t.cc	act	gac	ctc		aat.	tee	aac	aac		gtg	atc	1611
															Val		
204			400	1				405		1			410		• • •		
205	aag	ggc	tcc	cct	tcc	ttc	ggc	cct	gag	tcc	atc	tcc	acc	gag	acc	tgg	1659
	_														Thr		
207		415					420					425					
208	tct	gct	gag	cct	tac	ggc	cgt	aac	ctg	cac	ttc	ggt	atc	cgt	gag	cac	1707
209	Ser	Ala	Glu	Pro	Tyr	Gly	Arg	Asn	Leu	His	Phe	Gly	Ile	Arg	Glu	His	
210	430					435					440					445	
															acc		1755
	Ala	Met	Gly	Ser		Leu	Asn	Gly	Ile	Ser	Leu	His	Gly	Gly	Thr	Arg	
213					450					455					460		
															cct		1803
	Pro	Tyr	Gly	-	Thr	Phe	Leu	Ile		Ser	Asp	\mathtt{Tyr}	Met	•	Pro	Ala	
216				465					470					475			
															tgg		1851
	vaı	Arg		Ala	АТА	Leu	мет		Thr	ASP	АТа	Tyr	_	Val	Trp	Tnr	
219			480	-+-				485					490				1000
															cct Pro		1899
222	птэ	495	361	116	GIY	Leu	500	GIU	ASP	GIĀ	PIO	505	птъ	GIII.	PIO	val	
	паа		tta	act	aca	cta		acc	atc	cca	aat		tcc	atc	ctg	cat	1947
															Leu		134/
	510					515	9				520		001		Dou	525	
		qca	gat	qcq	aat	qaq	acc	qcc	caq	qct		qct	qca	qca	ctt		1995
															Leu		
228			-		530					535	-				540		
229	tac	aag	gaa	ggc	cct	aag	ggt	ctt	gca	ctg	acc	cgc	cag	aac	gtt	cct	2043
															Val		
231				545					550					555			
															cgc		2091
	Val	Leu		_		_		-				_		-	Arg	Gly	
234	•																
235	ggc	tac	gtc	ctg	gtt	gag	ggt	tcc	aag	gaa	acc	cca	gat	gtg	atc	ctc	2139
	GLĀ		Val	Leu	Val	Glu		Ser	Lys	Glu	Thr		Asp	Val	Ile	Leu	
237	n. t	575	.		.		580					585				a	0105
															aaa		2187
239		GTĀ	ser	GTÄ	ser	595	val	GID	ren	ата		ASN	АТА	Ата	Lys		
		422	~~+	~ ~ ~	aa.		~~~	~c+	000	a++	600	+	~++	act	+	605	2225
247	Ton	yaa cl	yct ala	gay	990 610	yıl Vəl	yca Nl=	yur N1=	Are	7721	yıt	uca co~	yut	DEC	tgc Cys	a Lg	2235
242	neu	GIU	ита	GIU	GTA	AGT	ита	WT a	ur.a	AGT	AGT	ser.	Val	PLO	Cys	wec	



VERIFICATION SUMMARY
PATENT APPLICATION: US/10/088,594A
DATE: 07/22/2002
TIME: 14:12:57

Input Set : A:\PTO.DC.txt

Output Set: N:\CRF3\07222002\J088594A.raw

L:3 M:283 W: Missing Blank Line separator, <120> field identifier
L:4 M:283 W: Missing Blank Line separator, <130> field identifier
L:5 M:283 W: Missing Blank Line separator, <140> field identifier
L:6 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:9 M:283 W: Missing Blank Line separator, <160> field identifier
L:11 M:283 W: Missing Blank Line separator, <210> field identifier
L:15 M:283 W: Missing Blank Line separator, <400> field identifier
L:89 M:283 W: Missing Blank Line separator, <400> field identifier
L:120 M:283 W: Missing Blank Line separator, <400> field identifier
L:120 M:283 W: Missing Blank Line separator, <400> field identifier
L:263 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3